CITY OF SHOREVIEW MINUTES CITY COUNCIL WORKSHOP MEETING December 14, 2015

CALL TO ORDER

Mayor Martin called the workshop meeting of the Shoreview City Council to order at 8:00 p.m. on December 14, 2015.

ROLL CALL

The following attended the meeting:

City Council: Mayor Martin; Councilmembers Johnson, Quigley, and Springhorn

Councilmember Wickstrom was absent.

Staff: Terry Schwerm, City Manager

Rebecca Olson, Asst. to City Manager Mark Maloney, Public Works Director

Morris and Dr. Bill Morris Leatherman Peter Leatherman

Company

SEH Mr. Mark Obermeier

The City Council met with Dr. Morris and Mr. Leatherman to discuss results of the Community Survey.

Mayor Martin noted the drop in satisfaction with building inspections. She asked if there is a better way to analyze that question. City Manager Schwerm responded that one factor is that sometimes there are more people dealing with building permits and inspections due to storm damage. In the last two years building activity has been less.

Councilmember Quigley also suggested that residents in the SHINE program look at code enforcement as inspections.

Mayor Martin asked the reason a higher number of people call City Hall in comparison to other cities, whether it is a good thing in that staff is accessible, or because there are more problems. Dr. Morris explained that the interaction with City Hall is positive. People do not shy away from calling. Mr. Schwerm added that some people do not distinguish between the Community Center and City Hall because they are located in the same building.

Councilmember Johnson noted membership usage of the Community Center at 40%. She would like to see usage year by year, especially with plans for expansion. Mr. Schwerm stated that there are approximately 3000 memberships of which 2000 are Shoreview based. He also feels that question is overstated. In the last survey it was 53%, and there are not that many memberships. Mr. Leatherman explained of that 50%, 40% are current members. Overall, there are 80 members out of the sample of 400 residents interviewed, which is 20% and closer to the actual number of members.

Councilmember Johnson stated that 56% of residents are aware of the Housing Resource Center (HRC) and that high number leads her to believe those residents are using HRC services. Staff has done a great job promoting the HRC, and usage is increasing.

Councilmember Springhorn asked if more people are concerned about break-ins because there is so little concern with violent crime. Dr. Morris agreed that violent crime is not a concern in the City. Mr. Schwerm noted that for several years the Sheriff's Department has had a sweep program that leaves information flyers on the windshield of cars if they notice that valuables are left in plain sight inside the car. The flyer advises drivers that by leaving valuables in sight, they are at risk for a break-in.

Mayor Martin asked if the 84% having internet at home is higher from other years. Dr. Morris stated that it has been 86%. That number has been fairly static in the last five years. The average expected in northern suburbs is 85%.

Councilmember Springhorn noted that email and social media is not high as a primary source of information, although the City's participation in social media has increased. Dr. Morris noted that there have been a number of communities who have tried to get people to use a website rather than a newsletter. That has been met with great resistance.

Councilmember Quigley asked if a component of the City's demographic is being missed by asking the same questions with each survey. Dr. Morris explained that after many years of receiving the *ShoreViews*, people are used to receiving detailed information in that format. Putting that same detail of information on social media does not work well and is off putting to many people. Social media is at 2% or 3% of people who consider that a source of information. It has been found that people over age 45 do not want to receive information by social media.

Looking at demographics, Mr. Leatherman noted that it is important to realize that of those over age 65, only 68% have access to the internet.

REVIEW OF TURTLE LAKE AUGMENTATION STUDY

Public Works Director Mark Maloney stated that the study was funded by the state, the homeowners' association and the city. The purpose of this report is to present the technical information from the study to the Council.

Mr. Mark Obermeier summarized the findings from the feasibility study. The lake level has had a history of fluctuation. During the period of augmentation, fluctuation was not as extreme as when there is no augmentation.

Objectives of the Feasibility Study:

- Reduce cyclical low water levels on Turtle Lake between periods of normal to above normal rainfall through augmentation.
- Mimic the historic water level fluctuation during past periods of augmentation, which was 1928 to 1989 before 1989, the level was between 891 to 892
- Treat augmentation source water to preserve current lake water quality
- Implement cost-effective infrastructure to support augmentation
- Outline next steps, including formation of a LID (Lake Improvement District)

Natural recovery through rainfall has addressed the level of Turtle Lake from 2013 to 2015. If augmentation had been used, the low levels would have been avoided and the lake level would have been kept at 891 to 892 feet.

The Feasibility Study considered the following:

- A complete water budget to predict fluctuation where water comes in and leaves the lake and ground water interaction
- Calculate augmentation volume to maintain the one foot operating range
- Identify infrastructure needed for augmentation
- Identify augmentation source quality
- Determine water quality treatment to prevent a negative lake response to augmentation
- Estimate construction costs

The DNR sets the high water mark for lakes. All lakes have outlets and the purpose of a high water mark is to prevent overflow that would damage property.

The water budget calibrates the model to the true lake level. That information is then used to calculate the augmentation volume needed. Volume was calculated for an average year and a maximum year when the lake level is low. The lake would not be pumped every year but two out of every three years based on historical levels of augmentation. Augmentation volume would range from 174 million gallons (17.0 inches in depth) in an average year to 195 million gallons (19.1 inches in depth) in a maximum year. These amounts represent 10% to 12% of the total lake volume for Turtle Lake. The volume determines the size infrastructure needed.

There are four sources for potentially bringing in water:

- St. Paul Water Authority using conduits north of County Road I
- Charley Lake which is close to Turtle Lake
- Pleasant Lake has better water quality than Charley Lake
- Snail Lake water from Sucker Lake is pumped into Snail Lake so there is some infrastructure already in place

Proposed augmentation infrastructure would include:

- A 1000 gallon per minute pump to operate May through November
- Augmentation transmission piping to force water to the lake which involves turf, pavement, utility
- Zebra mussel screening system which means putting in a screening facility with electrical, plumbing, HVAC, chemical and mechanical features

The backwash water from screening zebra mussels goes back into the St. Paul regional water system and not discharged back into the lake. The zebra mussel screens could remove up to 50% of phosphorus from the source water.

Focus was given to screening water phosphorus because it is the limiting nutrient for water quality in lakes. The more phosphorus in a lake, the more algae is produced. The amount of treatment for phosphorus was considered from the four potential water sources. It was found that no treatment for phosphorus would be needed from Snail Lake and Pleasant Lake. The model for lake quality is established by the Rice Creek Watershed. Charley Lake would require approximately 37% to 38% phosphorus removal for average to maximum augmentation years; the St. Paul Regional Water System would require 46.7% to 47.4% phosphorus removal.

Councilmember Quigley noted there could be complications with using Snail Lake as a water source because it is already being augmented. Augmentation for Snail Lake would likely have to be increased.

A comparison of estimated augmentation construction costs from the four water sources was presented:

St. Paul Regional Water System

Estimated Construction:	\$	972,000
With 47.4% phosphorus removal	\$1	,737,000

Charley Lake

Estimated Construction	\$1,783,000
With 38.3% phosphorus removal	\$2,548,000

Because the water from Charley Lake and the St. Paul Regional Water System is more polluted, sand filter system was added to infrastructure to screen out more pollutants.

Pleasant Lake

Estimated	Construction	\$1,966,000

No phosphorus removal needed

Snail Lake

Estimated Construction	\$3,450,000
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No phosphorus removal needed

Mr. Maloney stated that costs could be recouped from property owners as authorized by the City Council.

Recommendations from the Feasibility Study:

- The St. Paul Regional Water System looks to be the best source to use for augmentation of Turtle Lake. It is a close source so infrastructure would be small and non-invasive to property owners.
- The Carlson Road storm sewer would be used that would eliminate a lot of additional piping.
- A rapid sand filter and zebra mussel screening would be installed to protect water quality.
- The cost allocation for construction is approximately \$1,740,000.
- A Lake Improvement District (LID) would be the implementation mechanism for augmentation.

A structure measuring approximately 30 feet by 36 feet would be needed for above the installation of the augmentation pump and screening filters.

Factors to consider should an augmentation project move forward would be:

- Formation of a Lake Improvement District as described by statute
- Property acquisition
- Permits, approvals, agreements
- Final design, including treatment elements
- Final project costs, including engineering, legal, administrative, operations and maintenance
- Cost recovery through the Lake Improvement District
- Construction

Mayor Martin stated that the study has provided the information needed to determine that a project is possible. Her question is what the prevailing reason would be to consider such a project. There is no money in the City's CIP for this project. The only reason to consider this project would be to even out the fluctuation of lake levels. It is unknown whether there is Homeowners Association consensus regarding a response to this study.

Mr. Schwerm stated that water quality is a concern of homeowners and agencies involved in regulating Turtle Lake. There are approximately 200 homeowners on Turtle Lake. The City would need indication of the level of support for the project assuming a certain level of cost participation.

Councilmember Johnson noted that when the lake water levels were down, there was a lot of feedback from homeowners. She asked what feedback has been received since water levels have risen.

Mayor Martin stated that she has not received any communication, but homeowners know that any decision was waiting on the completion of this feasibility study. Some people have questioned an augmentation system now that the lake level is so high.

Ms. Marsha Soucheray, Turtle Lake Home Association member, asked if the three water sources not included in the recommendation would be eliminated from consideration. Mayor Martin answered that all water sources can be considered. It would depend on what the Council hears back from the Homeowners Association.

Mr. Obermier stated that the recommended water source is based on cost. Mr. Maloney added that all four sources would deliver the same water quality to the lake. There are more complications in terms of distance, land acquisition that add to the cost with the other water sources presented.

Mr. Tim Krinkie asked how the homeowners association should move forward. Mr. Schwerm suggested the Council have a discussion with the Homeowners Association Board at a future meeting. The survey used by the Homeowners Association stated "reasonable cost" to homeowners. Reasonable cost needs to be defined. A fairly large assessment to homeowners would be needed for this project. In order to assess homeowners, the City has to prove benefit to homeowners' properties. A substantial number of homeowners need to support the project. Otherwise costs could rise with legal challenges to assessments.

Councilmember Quigley stated that he does not see a project moving forward without a survey of homeowners that firmly support moving the project. An outline of responsibilities for the City and Homeowners Association should be documented and become part of a future project.

Mayor Martin stated that a future survey to homeowners needs to insure that questions are based on the information presented in the Feasibility Study. She cautioned trying to create a LID without substantial support similar to the Snail Lake consensus because it is expensive to set up.

It was the consensus of the Council to accept the report and plan a meeting with the Homeowners Association Board to discuss whether a project should be planned.

OTHER ISSUES

Mayor Martin stated that Planning Commission applications have been received and the Council needs to determine who to interview and when to conduct the interviews. It was the consensus of the Council to interview three candidates.. Interviews will be immediately prior to the January 11, 2016 workshop meeting.

The meeting adjourned.